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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,169	04/02/2004	Michael Bienvenu	031850/272210	2727

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EXAMINER

WASHBURN, DOUGLAS N

ART UNIT PAPER NUMBER

2863

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/817,169		BIENVENU ET AL.	
	Examiner		Art Unit	
	Douglas N. Washburn		2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 14, 15, 17-23, 25, 28, 29, 31-38, 40 and 42 is/are rejected.
- 7) ☒ Claim(s) 8, 10-13, 16, 24, 26, 27, 30, 39 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1 The information disclosure statement filed 2 April 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. **Specifically, Oloufa, A, Quality Control of Asphalt Compaction Using Gps-Based System Architecture", IEEE Robotics & Automation Magazine, 2002, pp. 29-35.** It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

2 The drawings are objected to because drawing figure 5 depicts plural (two) communication elements 450, however only one element is annotated or identified. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Amendment

3 Applicant's arguments, see amendment, filed 20 December 2005, with respect to the rejection of claims 1, 2, 8-11, 14, 15, 18-20, 24-26, 28, 29, 32, 33, 39 and 40 under §102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Jaselskis et al. (US 5,952,561) (Hereafter referred to as Jaselskis).

Applicant's arguments, see amendment, filed 20 December 2005, with respect to the rejection of claims 3-7, 21-23 and 34-38 under §103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Jaselskis in view of Densham et al. (US 5,132,871) (Hereafter referred to as Densham).

Applicant's arguments, see amendment, filed 20 December 2005, with respect to the rejection of claims 17, 31 and 42 under §103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Jaselskis.

Claim Rejections - 35 USC § 102

4 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 14, 15, 17-19, 25, 28, 29, 31-33, 40 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaselskis et al. (US 5,952,561) (Hereafter referred to as Jaselskis).

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Jaselskis teaches:

A measuring device (microwave sensor; column 7, line 56) for selectively and directly measuring a property (density; column 2, line 9) of a paving-related material (asphalt pavement; column 2, line 40) in regard to claim 1;

A computer device (computer; column 9, line 48; figure 3, element 48) capable of executing a software program (algorithms; column 11, line 30) product and communicating with a measuring device (signal processor; column 8, line 38), the computer device being configured to direct the measuring device to directly measure a property of a paving-related material according to a parameter determined by the software program product, and to receive data comprising the measured property of the paving-related material from the measuring device (column 8 lines 5-9) in regard to claim 1;

A communication element operably engaged between a measuring device and a computer device (cable; column 9, line 40) so as to allow communication therebetween, such that the measuring device directly measures a property of a paving-related material in response to direction of the computer device received via a communication element, the communication element being configured to allow the computer device to be spaced apart from the measuring device (figure 3), thereby allowing the computer device to be prepared, to include a parameter and to manipulate data, in spaced apart relation with respect to the measuring device in regard to claim 1;

A communication element comprises a wire element extending and connected between a computer device and a measuring device (cable; column 9, line 40) in regard to claim 2;

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A locating device operably engaged with at least one of a measuring device and a computer device, the locating device being configured to determine a location of at least one of the measuring device and the computer device (gps; column 12, lines 17-19) in regard to claim 9;

A measuring device is configured to directly measure at least one of a density (density; column 2, line 9), a density-related parameter, and a moisture content of at least one of a soil, an aggregate, and an asphalt paving mix in regard to claim 14;

A measuring device is selected from the group consisting of a nuclear density gauge, a nuclear moisture gauge, a seismic pavement analyzer, a stiffness gauge, a falling weight deflectometer, a ground penetrating radar device, a radio frequency device, an electromagnetic device, a microwave device (microwave sensor; column 7, line 56), a surface roughness measuring device, a pavement temperature sensor, a pavement temperature measuring device, and combinations thereof in regard to claim 15;

A computer device is configured to associate a time and date stamp with data when a property is measured (gps; column 12, lines 17-19) in regard to claim 17;

Preparing a computer device to execute a software program product for directing a measuring device to directly measure a property of a paving-related material, according to a parameter determined by a software program product (column 11, lines 29-33), and to receive data comprising the measured property (density; column 2, line 9) of the paving-related material from the measuring device (column 8, lines 3-9) in regard to claim 18;

Executing a software program product (column 2, lines 48-52) in regard to claim 18;

Communicating an executed software program product from a computer device to a measuring device via a communication element operably engaged therebetween (cable; column 9, line 40), such that the measuring device directly measures a property of a paving-related material in response thereto, the communication element being configured to allow the computer device to be spaced apart from the measuring device (figure 3) such that the computer device can be prepared, in spaced apart relation with respect to the measuring device, to include a parameter and to manipulate data (column 8, line 66 et seq; column 9, lines 1-4) in regard to claim 18;

Communicating data comprising a measured property of a paving-related material from a measuring device to a computer device (column 8, lines 5-9) via a communication element (cable; column 9, line 41) in regard to claim 19;

Determining a location of at least one of a measuring device and a computer device with a locating device operably engaged with at least one of the measuring device and the computer device (gps; column 12, lines 17-19) in regard to claim 25;

Preparing a computer device to execute a software program product for directing a measuring device to directly measure at least one of a density (density; column 2, line 9), a density related parameter, and a moisture content of at least one of a soil (column 11, lines 3-6), an aggregate, and an asphalt paving mix in regard to claim 28;

Preparing a computer device to execute a software program product for directing a measuring device comprising at least one of a nuclear density gauge, a nuclear moisture gauge, a seismic pavement analyzer, a stiffness gauge, a falling weight deflectometer, a ground penetrating radar device, a radio frequency device, an electromagnetic device, a microwave device (microwave sensor; column 7, line 56), a surface roughness measuring device, a pavement temperature sensor, a pavement temperature measuring device, to directly measure the property of the paving-related material in regard to claim 29;

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A computer device is configured to associate a time and date stamp with data when a property is measured (gps; column 12, lines 17-19) in regard to claim 31;

A computer device (computer; column 9, line 48; figure 3, element 48) capable of executing a software program product (column 11, lines 29-33) and communicating with a measuring device, the computer device being configured to direct the measuring device to measure a property of a paving-related material according to a parameter determined by the software program product, and to receive data comprising the measured property of the paving-related material from the measuring device (column 8, lines 3-9) in regard to claim 32;

A communication element (cable; column 9, line 40) operably engaged between a measuring device and a computer device so as to allow communication therebetween, such that the measuring device directly measures a property of a paving-related material (column 8, lines 3-9) in response to a direction of the computer device via the communication element, the communication element being configured to allow the computer device to be spaced apart from the measuring device, thereby allowing the computer device to be prepared, to include a parameter and to manipulate data, in spaced apart relation with respect to the measuring device in regard to claim 32;

A communication element comprises a wire element (cable; column 9, line 40) extending and connected between a computer device and a measuring device in regard to claim 33;

A locating device (gps; column 12, lines 17-19) operably engaged with at least one of a measuring device and a computer device, the locating device being configured to determine a location of the at least one of the measuring device and the computer device in regard to claim 40.

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And a computer device is configured to associate a time and date stamp with data when a property is measured (gps; column 12, lines 17-19) in regard to claim 42.

Claim Rejections - 35 USC § 103

5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-7, 20-23 and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoskinson in view of Densham et al. (US 5,132,871)(Hereafter referred to as Densham).

Jaselskis teaches:

A measuring device (microwave sensor; column 7, line 56) for selectively and directly measuring a property (density; column 2, line 9) of a paving-related material (asphalt pavement; column 2, line 40) in regard to claim 1;

A computer device (computer; column 9, line 48; figure 3, element 48) capable of executing a software program (algorithms; column 11, line 30) product and communicating with a measuring device (signal processor; column 8, line 38), the computer device being configured to direct the measuring device to directly measure a property of a paving-related material according to a parameter determined by the software program product, and to receive data comprising the measured property of the paving-related material from the measuring device (column 8 lines 5-9) in regard to claim 1;

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A communication element operably engaged between a measuring device and a computer device (cable; column 9, line 40) so as to allow communication therebetween, such that the measuring device directly measures a property of a paving-related material in response to direction of the computer device received via a communication element, the communication element being configured to allow the computer device to be spaced apart from the measuring device (figure 3), thereby allowing the computer device to be prepared, to include a parameter and to manipulate data, in spaced apart relation with respect to the measuring device in regard to claim 1;

Preparing a computer device to execute a software program product for directing a measuring device to directly measure a property of a paving-related material, according to a parameter determined by a software program product (column 11, lines 29-33), and to receive data comprising the measured property (density; column 2, line 9) of the paving-related material from the measuring device (column 8, lines 3-9) in regard to claim 18;

Executing a software program product (column 2, lines 48-52) in regard to claim 18;

Communicating an executed software program product from a computer device to a measuring device via a communication element operably engaged therebetween (cable; column 9, line 40), such that the measuring device directly measures a property of a paving-related material in response thereto, the communication element being configured to allow the computer device to be spaced apart from the measuring device (figure 3) such that the computer device can be prepared, in spaced apart relation with respect to the measuring device, to include a parameter and to manipulate data (column 8, line 66 et seq; column 9, lines 1-4) in regard to claim 18;

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A computer device (computer; column 9, line 48; figure 3, element 48) capable of executing a software program product (column 11, lines 29-33) and communicating with a measuring device, the computer device being configured to direct the measuring device to measure a property of a paving-related material according to a parameter determined by the software program product, and to receive data comprising the measured property of the paving-related material from the measuring device (column 8, lines 3-9) in regard to claim 32;

And a communication element (cable; column 9, line 40) operably engaged between a measuring device and a computer device so as to allow communication therebetween, such that the measuring device directly measures a property of a paving-related material (column 8, lines 3-9) in response to a direction of the computer device via the communication element, the communication element being configured to allow the computer device to be spaced apart from the measuring device, thereby allowing the computer device to be prepared, to include a parameter and to manipulate data, in spaced apart relation with respect to the measuring device in regard to claim 32.

Jaselskis does not fully teach:

A wire element configured to be removably engaged with at least one of a computer device and a measuring device in regard to claims 3 and 34;

A communication element comprises a connector having a first portion configured to be removably engaged with a second portion in regard to claims 4 and 35;

A first portion is engaged with a computer device and the second portion is engaged with a measuring device in regard to claims 5 and 36;

A first portion is engaged with the computer device and a second portion is engaged with a wire element extending and connected to the measuring device in regard to claims 6 and 37;

A first portion is engaged with a measuring device and a second portion is engaged with a wire element extending and connected to a computer device in regard to claims 7 and 38;

A communication element comprises a wire element, and the method comprises removably engaging the wire element with at least one of a computer device and a measuring device such that the wire elements extends and is connected between the computer device and the measuring device in regard to claim 20;

A communication element comprises a connector having a first portion engaged with a computer device and a second portion engaged with a measuring device, and the method comprises removably engaging the first portion with the second portion in regard to claim 21;

A communication element comprises a connector having a first portion engaged with a computer device and a second portion engaged with a wire element extending and connected to a measuring device, and the method comprises removably engaging the first portion with the second portion in regard to claim 22;

And a communication element comprises a connector having a first portion engaged with a measuring device and a second portion engaged with a wire element extending and connected to a computer device, and the method comprises removably engaging the first portion with the second portion in regard to claim 23.

Densham teaches:

A wire element (smart connector and cable; column 3, line 59) configured to be removably engaged with at least one of a computer device and a measuring device (figure 2) in regard to claims 3 and 34;

A communication element comprises a connector having a first portion configured to be removably engaged with a second portion (figure 5) in regard to claims 4 and 35;

A first portion is engaged with a computer device and a second portion is engaged with a measuring device (figure 5) in regard to claims 5 and 36;

A first portion is engaged with a computer device and a second portion is engaged with a wire element extending and connected to a measuring device (figure 5) in regard to claims 6 and 37;

A first portion is engaged with a measuring device and a second portion is engaged with a wire element extending and connected to a computer device (figure 5) in regard to claims 7 and 38.

A communication element comprises a wire element, and the method comprises removably engaging the wire element with at least one of a computer device and a measuring device such that the wire elements extends and is connected between the computer device and the measuring device (figure 5) in regard to claim 20;

A communication element comprises a connector having a first portion engaged with a computer device and a second portion engaged with a measuring device, and the method comprises removably engaging the first portion with the second portion (figure 5) in regard to claim 21;

A communication element comprises a connector having a first portion engaged with a computer device and a second portion engaged with a wire element extending and connected to a measuring device, and the method comprises removably engaging the first portion with the second portion (figure 5) in regard to claim 22;

And a communication element comprises a connector having a first portion engaged with a measuring device and a second portion engaged with a wire element extending and connected to a computer device, and the method comprises removably engaging the first portion with the second portion (figure 5) in regard to claim 23.

Regarding claims 3-7, 20-23 and 34-38, it would have been obvious to one skilled in the art at the time of the instant invention to modify the teaching of Jaselskis of communicating with a measuring device with the teaching of Densham of a smart connector and cable because a cable would have provided a communication link between a portable computer and a peripheral unit (measuring device).

Allowable Subject Matter

6 Claims 8, 10, 11, 24, 26 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for indicating allowability of claims 12, 13, 16, 27, 30 and 41 were presented in office action mailed 22 September 2005.

The following is an examiner's statement of reasons for allowance:

Claim 8 recites, in part, "A wireless transceiver operably engaged with each of the computer device and the measuring device". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 10 recites, in part, "a central computing system spaced apart from the computer device and the measuring device and configured to be capable of communicating the data with the computer device". This feature in combination with the remaining claimed structure avoids the prior art of record.

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Claim 11 recites, in part, "A central computing system is configured to communicate with the computer device so as to modify the software program product". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 24 recites, in part, "A wireless transceiver operably engaged with each of the computer device and the measuring device, and the method further establishing communication between the wireless transceivers so as to allow the computer device to communicate with the measuring device". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 26 recites, in part, "communicating at least one of the data and a modification of the software program product between the computer device and a central computing system spaced apart from the computer device and the measuring device". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 39 recites, in part, "a communication element comprises a wireless transceiver operably engaged with each of the computer device and the measuring device". This feature in combination with the remaining claimed structure avoids the prior art of record.

It is these limitations, which are not found, taught or suggested in the prior art of record, and are recited in the claimed combination that makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion


7 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas N. Washburn whose telephone number is (571) 272-2284. The examiner can normally be reached on Monday through Thursday 6:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DNW


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